

No.

200200251



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wisconsin Alumni Research Foundation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

POTATO

'White Pearl'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this seventh day of February, in the year two thousand and eight.

Attest:

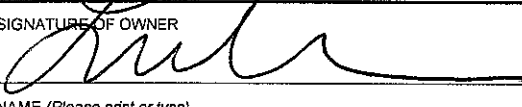
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Wisconsin Alumni Research Foundation		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME W-1355-1		3. VARIETY NAME White Pearl	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 614 North Walnut Street P.O. Box 7365 Madison, WI 53707-7365		5. TELEPHONE (include area code) 608-263-2500		FOR OFFICIAL USE ONLY PVPO NUMBER 200200251	
		6. FAX (include area code) 608-263-1064		FILING DATE August 15, 2002	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Corporation		8. IF INCORPORATED, GIVE STATE OF INCORPORATION Wisconsin		9. DATE OF INCORPORATION 9-14-25	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO PROTECT IN THIS APPLICATION. (First person listed will receive all papers) Lisa Mueller Dykema Gossett PLLC 10 South Wacker Drive, Suite 2300 Chicago IL 60606 per letter 4-10-07 LMC 9-27-2009				FILING AND EXAMINATION FEES: \$ 2705.00 DATE 8/15/02 CERTIFICATION FEE: \$ 768.00 DATE 10/30/07	
11. TELEPHONE (Include area code) 312-627-2184		12. FAX (Include area code) 312-876-1155		13. E-MAIL lmuellet@dykema.com	
14. CROP KIND (Common Name) potato		15. GENUS AND SPECIES NAME OF CROP Solanum tuberosum L.		16. FAMILY NAME (Botanical) Solanaceae	
17. IS THE VARIETY A FIRST GENERATION HYBRID? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,705), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no", go to item 22)	
20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED NUMBER 1,2,3, etc. (If additional explanation is necessary, please use the space indicated on the reverse.)		22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES April 2004 <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) per correspondence 6-19-2007 LMC 8-25-07	
23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)		24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER 		SIGNATURE OF OWNER			
NAME (Please print or type) Lisa V. Mueller		NAME (Please print or type)			
CAPACITY OR TITLE Attorney		DATE 8/14/02		CAPACITY OR TITLE	
				DATE	

## INSTRUCTIONS

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untre seeds, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank for \$2, (\$300 filing fee and \$2,150 examination fee), payable to "Treasurer of the United States" (*See Section 97.175 of the Regulations and Rules of Practice.*) Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$300 for issuance of the Certificate.

Plant Variety Protection Office  
Telephone: (301) 504-5518

### ITEM

- 16a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.
- 16b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
- (1) identify these varieties and state all differences objectively;
- (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences;
- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 16c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 16d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 16e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.
17. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant may NOT reverse this affirmative decision after the variety has been sold and so labelled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (*See P.L. 103-349 for additional information.*)
20. See Sections 41, 42, and 43 of the Act and Section 97.175 of the regulations for eligibility requirements.

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing change of ownership or assignment is specified in Section 97.175 of the regulations. (*See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.*)

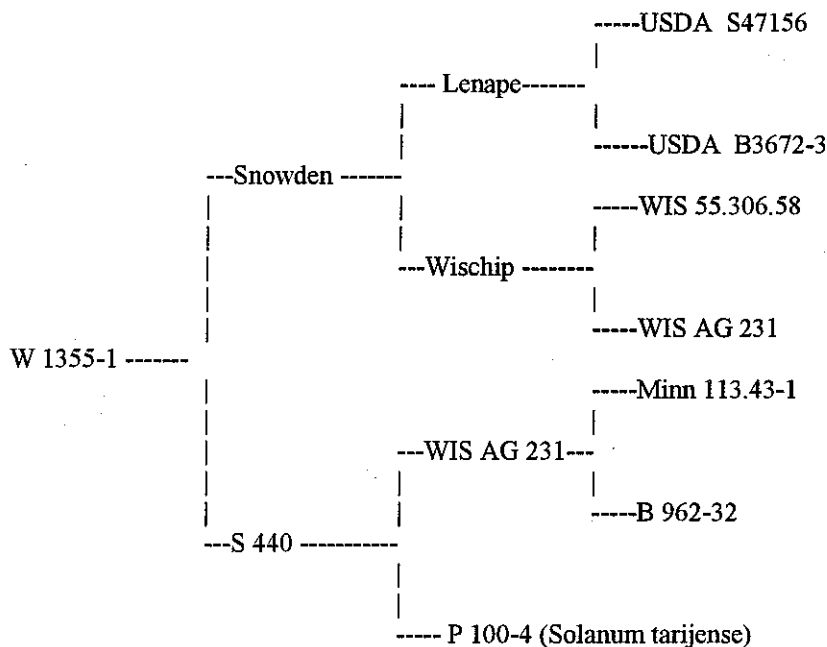
To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: See Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Washington, DC 20260; and to the Office of Management and Budget, Paperwork Reduction Project (OMB No. 0581-0056), Washington, DC 20503.

**Exhibit A**  
**Origin and Breeding History of the Variety W 1355-1**

**1. Genealogy and breeding.**

**1a. Genealogy.**



**1b. Breeding Method.**

As seen at 1a, the cross was made between a commercial variety, Snowden and a breeding line, S 440. A conventional breeding scheme based on individual clonal selection in generation F1 was used. The main selection criterion was to obtain a variety with round, white fleshed potatoes, which produces good chip color and specific gravity for the processing market, with a higher cold sweetening resistance than the standard variety Snowden and more adapted to the Wisconsin environmental conditions.

**2. Subsequent Stages of Selection and Multiplication.**

The cross was made in 1991 at Rhinelander Agricultural Research Station. In 1992 the clone was in seedling stage, in 1993 in 1 Hill Plots, in 1994 in 4 Hill Plots, in 1995 in 8 Hill Plots, in 1996 in the first year of replicated trial in Hancock and Rhinelander, in 1997 in the rapid multiplication field, in 1998 in the second year of replicated trial in Hancock and Rhinelander, in 1998 in Wisconsin State trial in Hancock and Antigo, and in 1998-2000 in North Central Regional Trial.

**3. Evidence of Uniformity and Stability.**

The genetic structure is highly uniform due to the vegetative propagation of the potato plants. The phenotypic expression can vary in function of the interaction between genotype and environment and therefore the following statements are made.

**3a. Uniformity.**

The tuber appearance is uniform in shape, depth of eyes, white slightly netted skin and white flesh. The tuber size is highly uniform around 5-6 oz.

**3b. Stability.**

Along the breeding stages in 1991- 1995 and the replicated trials in 1996, 1998 and 1999-2000, W 1355-1 proved to be stable in the tuber appearance, with exception of cases of diseases and physiological disorders.

**4. The Type and Frequency of Variants during reproduction and Multiplication.**

The potato line W 1355-1 is multiplied vegetatively, which keeps the genotypic structure unaltered. The frequency of natural mutations for tuber skin color, for maturity and foliage type is very likely less than 1 in 100,000 and the regular potato seed production systems do clonal selection discarding any variant which is not true to type (for instance the tolerances of Wisconsin Potato Seed Certification Program are 0.00% for Foundation and 0.1% for Certified categories).

**Exhibit A**

'W-1355-1' was observed in 1994-1995 at the Rhinelander Agricultural Research Station (ARS), between 1996-1998 in replicated trials at the Hancock and Rhinelander ARS, and Antigo, WI. Between 1998-2000, 'W-1355-1' was evaluated in 10 locations of AB (Canada), IA, MB (Canada), MI, MN, NE, ND, ON, OH and WI and was determined to be genetically uniform and stable from year to year and location to location with no evidence of variants.

Name of the most similar variety: 'Snowden'

A direct comparison of 'W-1355-1' with 'Snowden' based on resistance to cold sweetening as reflected on the chip color differences of chips processed from tubers stored at low temperatures (namely, temperatures of 4.4 or 5.5°C) shall now be presented.

Experimental Procedure:

The first trial was the 1999 Hancock trial. The field experimental design for this trial included 39 clones that were arranged in plots of sizes of 6.1m and that contained single rows of plants separated 0.30m within and 0.91m among rows in a randomized complete block design with three replications. Five randomly selected potatoes were fried from samples of each of the plots that had been stored at 4.4°C for one, three or six months. "Direct frying" refers to samples that were fried immediately after coming out of storage. "Reconditioned" refers to samples that were kept at 4.4°C and then taken out of the storage and put at room temperature for a period of two weeks prior to frying to revert the accumulation of reducing sugars (glucose and fructose to starch). "Reconditioned" tubers refer to frying that occurred after at least one day of placing the tubers at room temperature for reversion to occur. For the Hancock 1999 trial, chips were fried at 350°C for three minutes using a Hotpoint™ HK3 model (General Electric, Chicago Heights, IL). "Store time" refers to the amount of time in storage after harvest for the different temperature regimes. Chip color scores were done using the Snack Food Association 'Potato Chip Color Reference Chart', assigning a 1-10 score to the chips, where 1= uniformly bright, 2= excellent bright, 3 good light color tending to golden, 4-6 golden but not uniform or bright, 7= darker tone of golden; 8-10 are dark to very dark chips color. Analyses of variance for the cultivars were calculated by SAS proc mixed and the significance of the t-test for the difference of best linear unbiased predictors of the mean performance of 'W-1355-1' and 'Snowden' are given in the Table 1a and 1b below. The restricted maximum likelihood procedure used from SAS proc mixed used to estimate the best linear unbiased predictions of variety performance do not depend on the distribution of the data.

The second trial was the 2000 North Central Potato Variety trial. The experimental design of the East Grand Forks, MN frying experiment included 9 replicates, each coming from 16 tubers collected on 14 chipping clones included in the 2000 North Central Potato Variety trial grown with a field design similar to the Hancock 1999 trial. Chip frying protocol was similar to the Hancock trial, except that chip color was estimated by Hunter 'L' values using a Hunter Lab, D25 L Optical Sensor (colorimeter) standardized with a black glass and C2-39360 calibration tiles. The 'L' value estimated from the Hunter colorimeter is expressed in a 0-100 scale. Lighter colored chips from the Hunter colorimeter yield higher Hunter 'L' values.

Table 1a. Chip color of 'W-1355-1' vs. 'Snowden' at different frying and cold storage regimes in Wisconsin evaluated in 1-10 scale.

Year	Location	Store Temp	Store Time	Frying Condition	'W-1355-1' chip color	'Snowden' chip color	Chip color difference & P value of T test
1999	Hancock, WI	4.4°C	3 mo	Direct	5.8	7.5	1.7042 pvalue = 0.045
1999	Hancock, WI	4.4°C	3 mo	Reconditioned	6.2	7.6	1.439 p-value = 0.076

Note: Experiment were run with potatoes coming from cold storage temperatures (4.4 and 5.5°C), chip color from 'W-1355-1' were lighter than chip color from 'Snowden' as expressed by lower score in a 1-10 scale (Hancock WI trial). P-values associated with chip color difference between 'W-1355-1' and 'Snowden' indicate the probability that a difference is claimed and not real (type I error).

Table 1b. Chip color of 'W-1355-1' vs. 'Snowden' at different frying and cold storage regimes evaluated at East Grand Forks, MN.

Year	Location	Store Temp	Store Time	Frying Condition	'W-1355-1' chip color	'Snowden' chip color	Chip color difference & P value of T test
2000	East Grand Forks, MN	5.5°C	7 mo	Direct	55.9	52.7	2.3 pvalue = <0.0001
2000	East Grand Forks, MN	8.8°C	7 mo	Direct	48.2	46.5	1.7542 p-value = 0.0400
2000	East Grand Forks, MN	5.5°C	3 mo	Direct	54.3	48.5	5.7981 pvalue = <0.0001
2000	East Grand Forks, MN	8.8°C	3 mo	Direct	54.4	54.6	-0.246 <sup>NS</sup> pvalue = 0.4027

Note: Experiment were run with potatoes coming from cold storage temperatures (4.4 and 5.5°C), chip color from 'W-1355-1' were lighter than chip color from 'Snowden' as expressed by larger Hunter 'L' values for the evaluation of chips coming from colder storage temperature in the East Grand Forks trial. Hunter colorimeter 'L' values are expressed in a 0-100 scale. P-values associated with chip color difference between 'W-1355-1' and 'Snowden' indicate the probability that a difference is claimed and not real (type I error).

### Statement of Distinctiveness

'W-1355-1' is distinct from any other potato variety. As mentioned above, 'W1355-1' is most similar to 'Snowden', but it is distinct from 'Snowden' in its superior resistance to tuber cold sweetening which is evidenced by the production of lighter color chips when it is processed after being stored at low temperatures (e.g. 4.4°C or 5.5) after 3 months.

## NAME OF APPLICANT(S)

Wisconsin Alumni Research Foundation

## FOR OFFICIAL USE ONLY

PVPO NUMBER

200200251

ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)

614 North Walnut Street  
P.O. Box 7365  
Madison, WI 53707-7365

VARIETY (V) NAME

White Pearl

per correspondence  
9-27-2007TEMPORARY OR EXPERIMENTAL  
DESIGNATION

W 1355-1

REFERENCE VARIETIES: Enter the reference variety name in the appropriate box

Reference Variety 1 (R1)	Reference Variety 2 (R2)	Reference Variety 3 (R3)	Reference Variety 4 (R4)
ATLANTIC	SNOWDEN		

## 1. MARKET CHARACTERISTICS:

## MARKET CLASS:

1 = Yellow-flesh tablestock; 2 = Round-white tablestock; 3 = Chip-processing; 4 = Frozen-processing;  
5 = Russet tablestock; 6 = Other

V	3	R1	3	R2	3	R3		R4	
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## 2. PLANT CHARACTERISTICS:

## GROWTH HABIT: (See figure 1)

3 = Erect (&gt;45° with ground); 5 = Semi-erect (30-45° with ground); 7 = Spreading.

V	5	R1	5	R2	5	R3		R4	
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## TYPE:

1 = Stem (foliage open, stems clearly visible); 2 = Intermediate; 3 = Leaf (Foliage closed, stems hardly visible)

V	2	R1	3	R2	2.5	R3		R4	
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MATURITY: Days after planting (DAP) at vine senescence

V	130	R1	120	R2	118	R3		R4	
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## PLANTING DATE:

V	APRIL 25	R1	APRIL 25	R2	APRIL 25	R3		R4	
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## REGION/AREA:

V	HANCOCK WISCONSIN	R1	HANCOCK WISCONSIN	R2	HANCOCK WISCONSIN	R3		R4	
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**MATURITY CLASS:**

1 = Very Early (<100 DAP); 2 = Early (100-110 DAP); 3 = Mid-season (111-120 DAP); 4 = Late (121-130 DAP);  
5 = Very Late (>130 DAP).

V	4
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R1	3
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R2	3
----	---

R3	
----	--

R4	
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**3. STEM CHARACTERISTICS:** *Measure at early first bloom***STEM ANTHOCYANIN COLORATION:**

1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	5
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R1	2
----	---

R2	2
----	---

R3	
----	--

R4	
----	--

**STEM WINGS:** *(See figure 12)*

1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

V	3
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R1	4
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R2	6
----	---

R3	
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R4	
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**4. LEAF CHARACTERISTICS:****LEAF COLOR:** *Observe fully developed leaves located on middle  $\frac{1}{3}$  of plant*

1 = Yellowish-green; 2 = Olive-green; 3 = Medium green; 4 = Dark green; 5 = Grey-green; 6 = Other \_\_\_\_\_

V	3.5
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R1	3.5
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R2	3.5
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R3	
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R4	
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**LEAF COLOR:** *Observe fully developed leaves located on middle  $\frac{1}{3}$  of plant and circle the appropriate color chart*

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	7.5 GY 5/4
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R1	7.5 GY 5/4
----	---------------

R2	7.5 GY 5/6
----	---------------

R3	
----	--

R4	
----	--

**LEAF PUBESCENCE DENSITY:**

1 = Absent; 2 = Sparse; 3 = Medium; 4 = Thick; 5 = Heavy

V	2.5
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R1	2
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**LEAF PUBESCENCE LENGTH:**

1 = None; 2 = Short; 3 = Medium; 4 = Long; 5 = Very long

V	2
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R1	2
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R2	2
----	---

R3	
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R4	
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(Note: Descriptor #19 can be used to describe the type and length of the glandular trichomes observed.)

**LEAF SILHOUETTE:** *(See figure 2)*

1 = Closed; 3 = Medium; 5 = Open

V	3
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R1	3
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R2	3
----	---

R3	
----	--

R4	
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**PETIOLES ANTHOCYANIN COLORATION:**

1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very Strong

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V	3
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R1	1
----	---

R2	1
----	---

R3	
----	--

R4	
----	--

**LEAF STIPULES SIZE:** (See figure 13)

1 = Absent; 3 = Small; 5 = Medium; 7 = Large

V	3
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R1	5
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R2	5.5
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R3	
----	--

R4	
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**TERMINAL LEAFLET SHAPE:** (See figure 3 & 11)

1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical;  
6 = Obovate; 7 = Oblong; 8 = Other

V	2
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R1	3
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**TERMINAL LEAFLET TIP SHAPE:** (See figure 4 & 11)

1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other

V	3
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R1	3
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**TERMINAL LEAFLET BASE SHAPE:** (See figure 5 & 11)

1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other

V	4
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R1	4
----	---

R2	4
----	---

R3	
----	--

R4	
----	--

**TERMINAL LEAFLET MARGIN WAVINESS:**

1 = Absent; 2 = Slight; 3 = Weak; 4 = Medium; 5 = Strong

V	4
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R1	4
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**NUMBER OF PRIMARY LEAFLET PAIRS:** (See figure 11)

**AVERAGE:**

V	3
---	---

R1	3
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**RANGE:**

V	2 to 4	R1	2 to 3	R2	3 to 4	R3	to	R4	to
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**PRIMARY LEAFLET TIP SHAPE:** (See figure 4 & 11)

1 = Acute; 2 = Cuspidate; 3 = Acuminate; 4 = Obtuse; 5 = Other

V	3
---	---

R1	3
----	---

R2	3
----	---

R3	
----	--

R4	
----	--

**PRIMARY LEAFLET SHAPE:** (See figure 3 & 11)

200200251

1 = Narrowly ovate; 2 = Medium ovate; 3 = Broadly ovate; 4 = Lanceolate; 5 = Elliptical;  
6 = Obovate; 7 = Oblong; 8 = Other

V	3	R1	1	R2	1.5	R3		R4	
---	---	----	---	----	-----	----	--	----	--

**PRIMARY LEAFLET BASE SHAPE:** (See figure 5 & 11)

1 = Cuneate; 2 = Acute; 3 = Obtuse; 4 = Cordate; 5 = Truncate; 6 = Lobed; 7 = Other

V	4	R1	3	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

**NUMBER OF SECONDARY AND TERTIARY LEAFLET PAIRS:** (See figure 11)

**AVERAGE:**

V	3	R1	3	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

3 II 1-2 III

2 II 1 III

2 II 1 III

**RANGE:**

V	3 to 4	R1	1 to 3	R2	1 to 3	R3	to	R4	to
---	--------	----	--------	----	--------	----	----	----	----

**5. INFLORESCENCE CHARACTERISTICS:**

**NUMBER OF INFLORESCENCE / PLANT:**

**AVERAGE:**

V	3	R1	4	R2	8	R3		R4	
---	---	----	---	----	---	----	--	----	--

**RANGE:**

V	2 to 6	R1	2 to 4	R2	6 to 12	R3	to	R4	to
---	--------	----	--------	----	---------	----	----	----	----

**NUMBER OF FLORETS / INFLORESCENCE:**

**AVERAGE:**

V	8	R1	6	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

FLOWERS EARLIER

FLOWERS LATER

FLOWERS EARLIER

**RANGE:**

V	6 to 8	R1	3 to 9	R2	2 to 4	R3	to	R4	to
---	--------	----	--------	----	--------	----	----	----	----

**COROLLA INNER SURFACE COLOR:** Measure predominant color of newly open flower and circle the appropriate color chart  
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	WHITE	R1	PURPLE 5R 7/2	R2	WHITE	R3		R4	
---	-------	----	------------------	----	-------	----	--	----	--

**COROLLA OUTER SURFACE COLOR:** Measure predominant color of newly open flower and circle the appropriate color chart  
Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	WHITE	R1	PURPLE 5R 7/2 WHITE STRIPS	R2	WHITE	R3		R4	
---	-------	----	----------------------------------	----	-------	----	--	----	--

**COROLLA SHAPE:** (See figure 6)

1 = Very rotate; 2 = Rotate; 3 = Pentagonal; 4 = Semi-stellate; 5 = Stellate

200200251

V	3	R1	2	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

**CALYX ANTHOCYANIN COLORATION:**

1 = Absent; 3 = Weak; 5 = Medium; 7 = Strong; 9 = Very strong

V	1	R1	1	R2	1	R3		R4	
---	---	----	---	----	---	----	--	----	--

**ANTHER COLOR:** Measure when newly opened flower is fully expanded and circle the appropriate color chart  
 Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	2.5 y 8/10	R1	2.5 y 8/10	R2	2.5 y 8/10	R3		R4	
---	---------------	----	---------------	----	---------------	----	--	----	--

**ANTHER SHAPE:** (See figure 7)

1 = Broad cone; 2 = Narrow cone; 3 = Pear shape cone; 4 = Loose; 5 = Other

V	2	R1	1	R2	2	R3		R4	
---	---	----	---	----	---	----	--	----	--

**POLLEN PRODUCTION:**

1 = None; 3 = Some; 5 = Abundant

V	2	R1	2	R2	2	R3		R4	
---	---	----	---	----	---	----	--	----	--

**STIGMA SHAPE:** (See figure 8)

1 = Capitate; 2 = Clavate; 3 = Bi-lobed

V	1	R1	1	R2	1	R3		R4	
---	---	----	---	----	---	----	--	----	--

**STIGMA COLOR:** Circle the appropriate color chart

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	2.5 4Y 8/8	R1	2.5 4Y 8/8	R2	2.5 4Y 8/8	R3		R4	
---	------------	----	------------	----	------------	----	--	----	--

**BERRY PRODUCTION:** Under field conditions

1 = None; 3 = Low; 5 = Moderate; 7 = Heavy; 9 = Very heavy

V	3	R1	1.5	R2	2	R3		R4	
---	---	----	-----	----	---	----	--	----	--

# 5. TUBER CHARACTERISTICS:

200200251

## PREDOMINANT SKIN COLOR:

1 = White; 2 = Light Yellow; 3 = Yellow; 4 = Buff; 5 = Tan; 6 = Brown; 7 = Pink; 8 = Red;  
9 = Purplish-red; 10 = Purple; 11 = Dark purple-black; 12 = Other

V	4	R1	5	R2	5	R3		R4	
---	---	----	---	----	---	----	--	----	--

## GIVE COLOR CHART VALUE AND CIRCLE THE APPROPRIATE COLOR CHART

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	2.5 Y 7/4	R1	2.5 Y 7/4	R2	2.5 Y 7/4	R3		R4	
---	-----------	----	-----------	----	-----------	----	--	----	--

## SECONDARY SKIN COLOR:

1 = Absent; 2 = Present, please describe

V	1	R1	1	R2	1	R3		R4	
---	---	----	---	----	---	----	--	----	--

## IF PRESENT, GIVE COLOR CHART VALUE AND CIRCLE THE APPROPRIATE COLOR CHART

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

## SECONDARY SKIN COLOR DISTRIBUTION: If present NO

1 = Eyes; 2 = Eyebrows; 3 = Splashed; 4 = Scattered; 5 = Spectacled; 6 = Stippled; 7 = Other

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

## SKIN TEXTURE:

1 = Smooth; 2 = Rough (flaky); 3 = Netted; 4 = Russetted; 5 = Heavily russetted; 6 = Other

V	2	R1	3	R2	2.5	R3		R4	
---	---	----	---	----	-----	----	--	----	--

## TUBER SHAPE: (See figure 10)

1 = Compressed; 2 = Round; 3 = Oval; 4 = Oblong; 5 = Long; 6 = Other

V	2	R1	2.5	R2	2.5	R3		R4	
---	---	----	-----	----	-----	----	--	----	--

## TUBE THICKNESS:

1 = Round; 2 = Medium thick; 3 = Slightly flattened; 4 = Flatted; 5 = Other

V	2	R1	2	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

## TUBER LENGTH (mm):

200200251

AVERAGE: 68.5

V 6.85

72.9

R1 7.29

71.7

R2 7.17

R3

R4

## RANGE:

V 5.20 to 10.90

R1 5.0 to 11.3

R2 5.0 to 9.5

R3 to

R4 to

## STANDARD DEVIATION:

V 1.02 10.2

R1 1.44 14.4

R2 0.97 9.7

R3

R4

## AVERAGE WEIGHT OF SAMPLE TAKEN:

V 24.7

R1 33.2

R2 32.85

R3

R4

## TUBER WIDTH (mm):

AVERAGE: 61.8

V 6.18

66.1

R1 6.61

65.8

R2 6.58

R3

R4

## RANGE:

V 4.8 to 8.4

R1 4.5 to 10.2

R2 3.5 to 7.0

R3 to

R4 to

## STANDARD DEVIATION:

V 0.77 7.7

R1 1.30 13.0

R2 1.0 10.0

R3

R4

per correspondence 6-19-2007

LMC 09-25-2007

## AVERAGE WEIGHT OF SAMPLE TAKEN:

V 24.7

R1 33.2

R2 32.85

R3

R4

## TUBER THICKNESS (mm):

AVERAGE:

V 4.59

R1 5.39

R2 5.23

R3

R4

## RANGE:

V 3.6 to 6.8

R1 3.8 to 7.5

R2 3.9 to 6.7

R3 to

R4 to

## STANDARD DEVIATION:

V 0.56

R1 0.91

R2 0.65

R3

R4

## AVERAGE WEIGHT OF SAMPLE TAKEN:

V 24.7

R1 33.2

R2 32.85

R3

R4

## TUBER EYE DEPTH:

1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very deep

V 2

R1 2

R2 3

R3

R4

**TUBER LATERAL EYES**

1 = Protruding; 2 = Shallow; 3 = Intermediate; 4 = Deep; 5 = Very deep

200200251

V	2	R1	2	R2	3	R3		R4	
---	---	----	---	----	---	----	--	----	--

**NUMBER EYE / TUBER:****AVERAGE:**

V	7	R1	7	R2	7	R3		R4	
---	---	----	---	----	---	----	--	----	--

**RANGE:**

V	7 to 9	R1	7 to 9	R2	6 to 9	R3	to	R4	to
---	--------	----	--------	----	--------	----	----	----	----

**DISTRIBUTION OF TUBER EYES:**

1 = Predominantly apical; 2 = Evenly distributed

V	2	R1	2	R2	2	R3		R4	
---	---	----	---	----	---	----	--	----	--

**PROMINENCE OF TUBER EYEBROWS:**

1 = Not prominent; 2 = Slight prominence; 3 = Medium prominence; 4 = Very prominence; 5 = Other

V	1	R1	1	R2	1	R3		R4	
---	---	----	---	----	---	----	--	----	--

**PRIMARY TUBER FLESH COLOR: Circle the appropriate color chart**

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V	WHITE	R1	WHITE	R2	WHITE	R3		R4	
---	-------	----	-------	----	-------	----	--	----	--

**SECONDARY TUBER FLESH COLOR:**

1 = Absent; 2 = Present, please describe

V	1	R1	1	R2	1	R3		R4	
---	---	----	---	----	---	----	--	----	--

**IF PRESENT, CIRCLE THE APPROPRIATE COLOR CHART:**

Royal Horticulture Society Color Chart value or Munsell Color Chart value

V		R1		R2		R3		R4	
---	--	----	--	----	--	----	--	----	--

**NUMBER OF TUBER / PLANT:**

1 = Low (&lt;8); 2 = Medium (8 -15); 3 = High (&gt;15)

V	3	R1	2	R2	2	R3		R4	
---	---	----	---	----	---	----	--	----	--

## 6. DISEASES CHARACTERISTICS:

200200251

DISEASES REACTION: 0 = NOT TESTED; 1 = RESISTANT; 3 = MODERATELY RESISTANT;  
5 = MODERATELY SUSCEPTIBLE; 7 = SUSCEPTIBLE; 9 = HIGHLY SUSCEPTIBLE

BACTERIAL RING ROT: Foliar reaction

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

BACTERIAL RING ROT: Tuber reaction

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

LATE BLIGHT (tuber)

V	7	R1	7	R2	7	R3		R4	
---	---	----	---	----	---	----	--	----	--

Late Blight (foliar)

PLRV (leaf roll)

V	3	R1	3	R2	7	R3		R4	
---	---	----	---	----	---	----	--	----	--

PVX

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

PVY

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

OTHER: Common Scab

V	5	R1	7	R2	7	R3		R4	
---	---	----	---	----	---	----	--	----	--

OTHER: Early Blight; Pink Rot; Soft Rot: all:

V	7	R1	7	R2	7	R3		R4	
---	---	----	---	----	---	----	--	----	--

per correspondence 6-19-2007

## 7. PESTS CHARACTERISTICS:

LHC 9-25-2007

PEST REACTION: 0 = NOT TESTED; 1 = RESISTANT; 3 = MODERATELY RESISTANT;  
5 = MODERATELY SUSCEPTIBLE; 7 = SUSCEPTIBLE; 9 = HIGHLY SUSCEPTIBLE

GOLDEN NEMATODE

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

OTHER:

V	0	R1		R2		R3		R4	
---	---	----	--	----	--	----	--	----	--

## 8. GENE TRAITS:

INSERTION OF GENES:

☐

YES

☐

NO

If YES, describe the gene(s) introduced or attach information:

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**9. QUALITY CHARACTERISTICS:**CHIEF MARKET: CHIP PROCESSING

200200251

SPECIFIC GRAVITY (wt. air /wt. air - wt. water)

1 &lt; 1.060; 2 = 1.060-1.069; 3 = 1.070-1.079; 4 = 1.080-1.089; 5 &gt; 1.090

V	4	R1	5	R2	4	R3		R4	
---	---	----	---	----	---	----	--	----	--

TOTAL GLYCOALKALOID CONTENT (mg. / 100 g. fresh tuber)

V	9.53	R1	11.64	R2	14.47	R3		R4	
---	------	----	-------	----	-------	----	--	----	--

OTHER QUALITY CHARACTERISTICS: Describe any other quality characteristics that may aid in identification, (e.g. chip-processing, french fry processing, baking, boiling, after-cooking darkening). Please attach data and corresponding protocol.

CHIPPING VERY WELL FROM ~~42°F~~ AFTER 6 MONTH STORAGE AT 42°F (A COLD SWEETENING RESISTANT POTATO).

**11. CHEMICAL IDENTIFICATION:**

Describe chemical traits of the candidate variety that aid in its identification (e.g. protein or DNA electrophoresis). Please attach data and the corresponding protocol.

ISOZYME PATTERN:

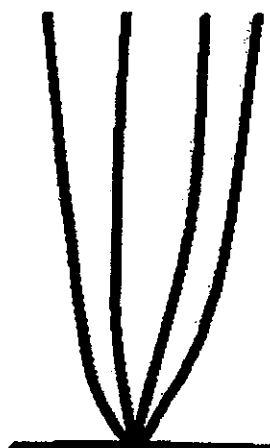
MDH-1 1<sup>1</sup>1<sup>2</sup>1<sup>2</sup>1<sup>4</sup>PMM-1 1<sup>1</sup>1<sup>2</sup>1<sup>3</sup>1<sup>3</sup>MDH-2 2<sup>2</sup>2<sup>2</sup>2<sup>2</sup>2<sup>2</sup>PGM-2 2<sup>2</sup>2<sup>2</sup>2<sup>2</sup>2<sup>2</sup>GPDH-B 3<sup>1</sup>3<sup>2</sup>3<sup>2</sup>3<sup>2</sup>PGL-1 1<sup>2</sup>1<sup>2</sup>1<sup>2</sup>1<sup>2</sup>GOT-1 1<sup>3</sup>1<sup>3</sup>1<sup>4</sup>1<sup>4</sup>PRX-3 3<sup>1</sup>3<sup>1</sup>3<sup>1</sup>3<sup>1</sup>GOT-2 2<sup>1</sup>2<sup>3</sup>2<sup>3</sup>2<sup>5</sup>**12. ADDITIONAL COMMENTS AND CHARACTERISTICS:**

Include any additional descriptors that would be useful in distinguishing the candidate variety.

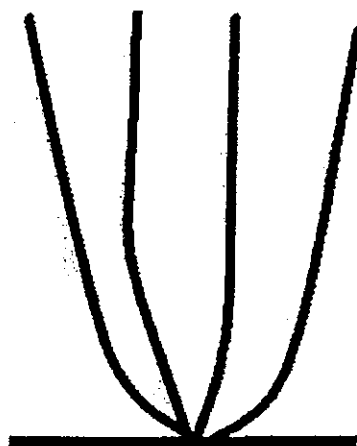
SENSITIVE TO SENCOR HERBICIDE (METRABENZAN)

**Exhibit C**  
**Description of tuber sprouts grown under diffuse light**

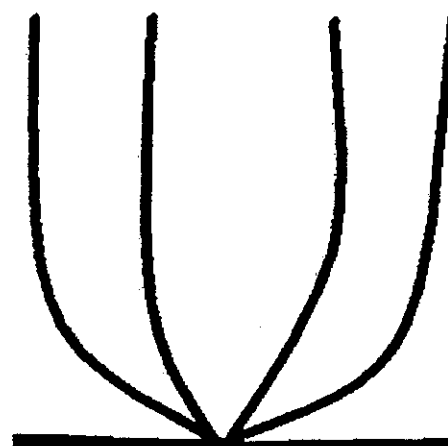
Light Sprout Characteristics	W 1355-1	Snowden	Atlantic
General shape: 1 = spherical, 2 = ovoidal, 3 = conical, 4 = broad conical	4	2	3
Base: Pubescence 1 = absent, 3 = weak, 5 = medium, 7 = strong	3	1	5
Base: Anthocyanin coloration 1 = green, 2 = red-violet, 3 = blue-violet, 4 = pale pink	3	4	2
Base: Intensity of anthocyanin coloration 1 = absent, 3 = weak, 5 = medium, 7 = strong, 9 = very strong	7	2	5
Tip: Habit 3 = closed, 5 = medium, 7 = open	5	3	3
Tip: Pubescence 1 = absent, 3 = weak, 5 = medium, 7 = strong	7	3	3
Tip: Anthocyanin coloration 1 = green, 2 = red-violet, 3 = blue-violet, 4 = other - blue violet green	4	1	2
Tip: Intensity of anthocyanin coloration 1 = absent, 3 = weak, 5 = medium, 7 = strong, 9 = very strong	5	1	3
Root initials: frequency 3 = low, 5 = medium, 7 = high	5	5	3
Protrusion of lenticels 3 = weak, 5 = medium, 7 = strong	5	5	3
Length of lateral shoots 3 = short, 5 = medium, 7 = long	3	5	3

**Figure 1: Growth Habit**

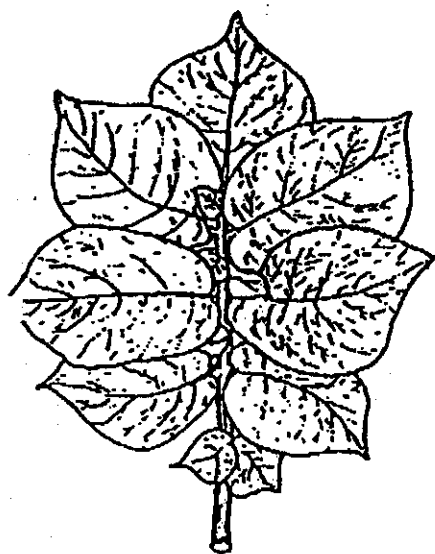
3 = Erect  
 $> 45^\circ$  with ground



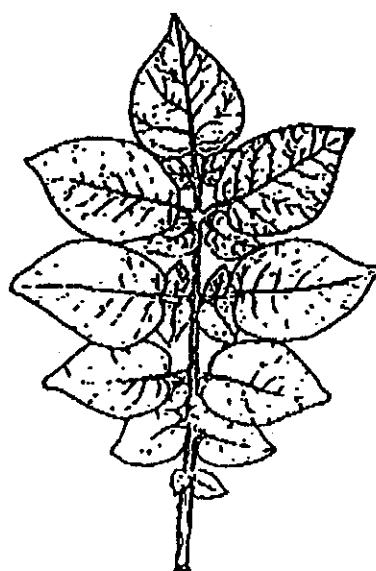
5 = Semi-erect  
 $30-45^\circ$  with ground



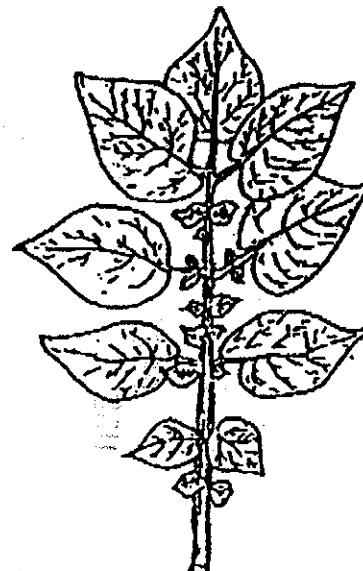
7 = Spreading  
 $< 30^\circ$  with ground

**Figure 2: Leaf Silhouette**

1 = Closed



3 = Medium



5 = Open

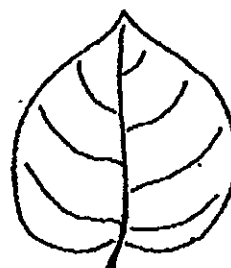
**Figure 3: Terminal Leaflet Shape / Primary Leaflet Shape**



**1=Narrowly  
Ovate**



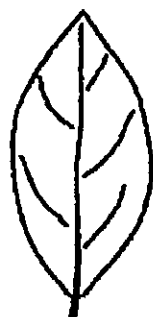
**2=Medium  
Ovate**



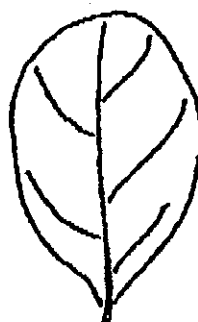
**3=Broadly  
Ovate**



**4=Lanceolate**



**5=Elliptical**



**6=Obovate**



**7=Oblong**

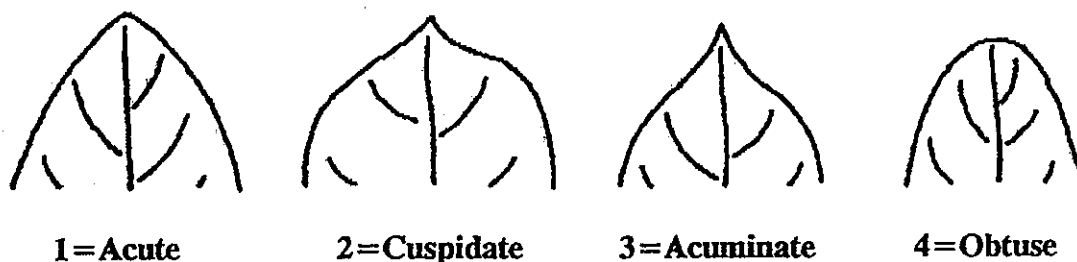
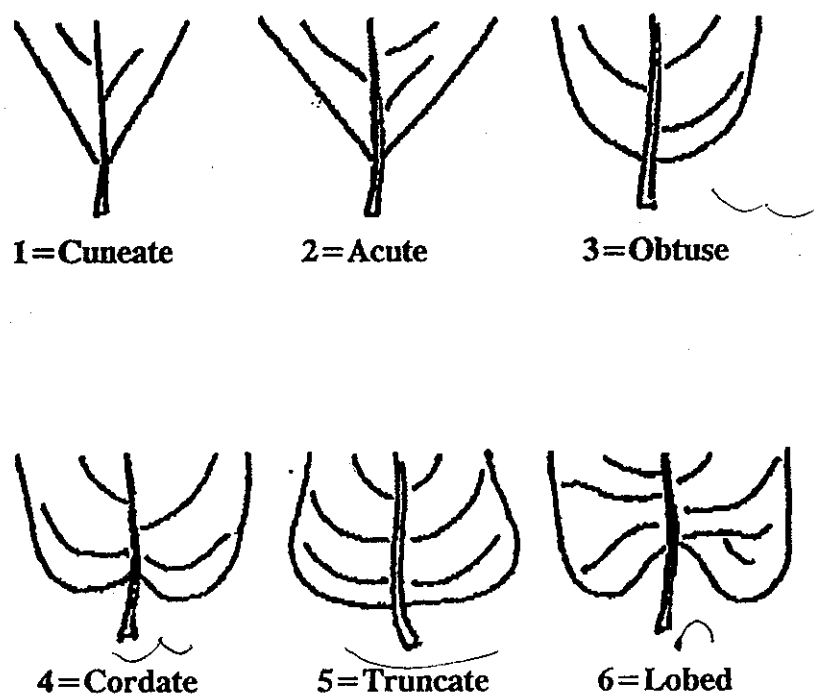
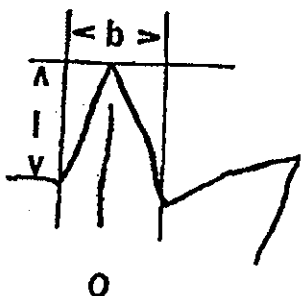
**Figure 4: Terminal Leaflet Shape of Tip / Primary Leaflet Shape of Tip****Figure 5: Terminal Leaflet Shape of Base / Primary Leaflet Shape of Base**

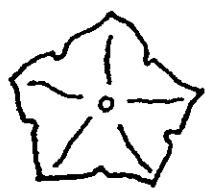
Figure 6: Corolla Shape



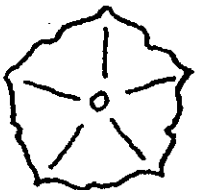
stellate  
 $l > b$



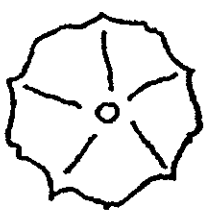
semi-stellate  
 $l = b$



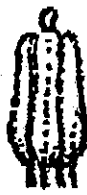
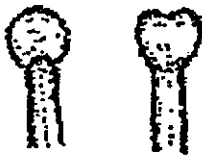
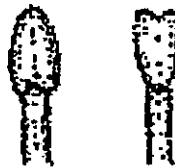
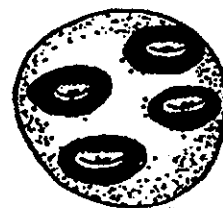
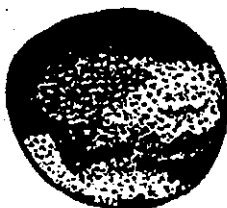
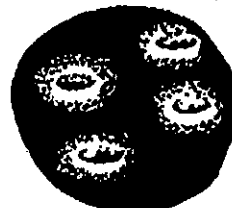
pentagonal  
 $l < b$



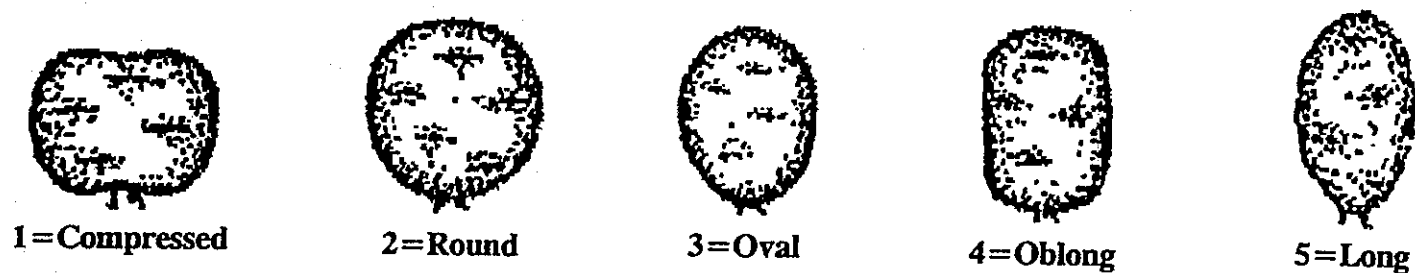
rotate  
 $l \ll b$



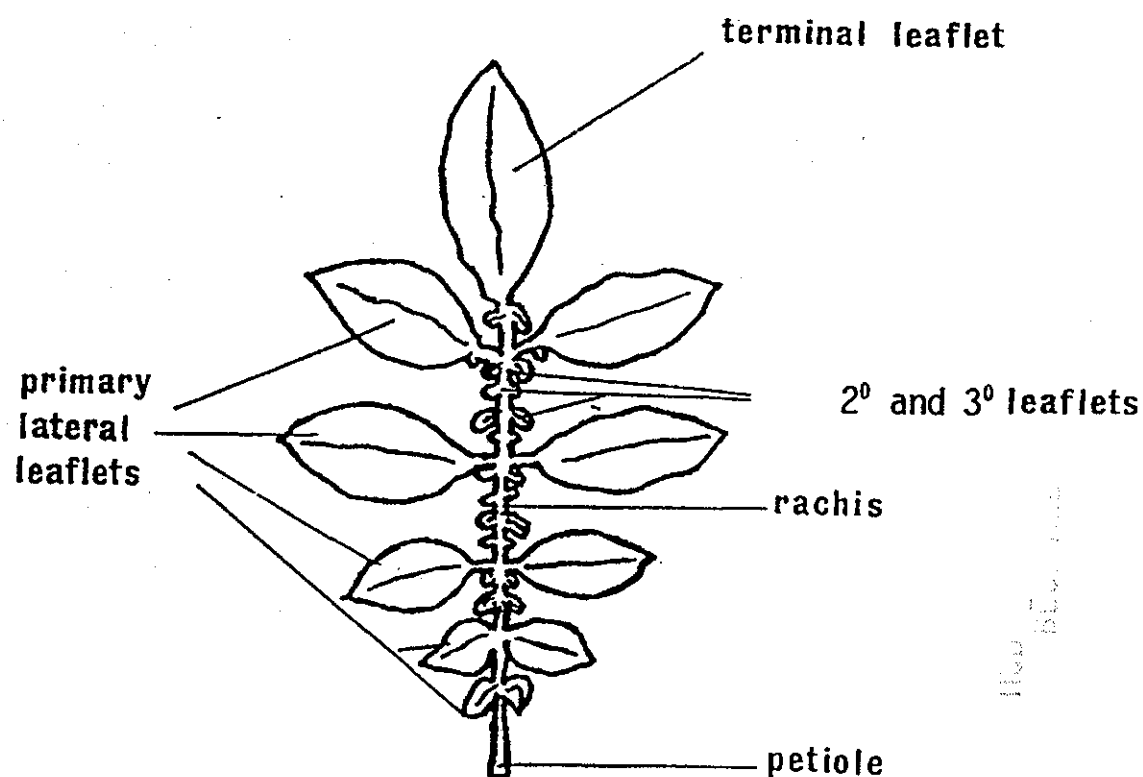
very rotate  
 $l \lll b$

**Figure 7: Anther Shape****1=Broad cone****2=Narrow cone****3=Pear shape cone****4=Loose****Figure 8: Stigma Shape****1=Capitate****2=Clavate****3=Bilobed****Figure 9: Distribution of Secondary Tuber Color****1=Eyes****2=Eyebrows****3=Splashed****4=Scattered****5=Spectacled****6=Stippled**

**Figure 10: Tuber Shape**

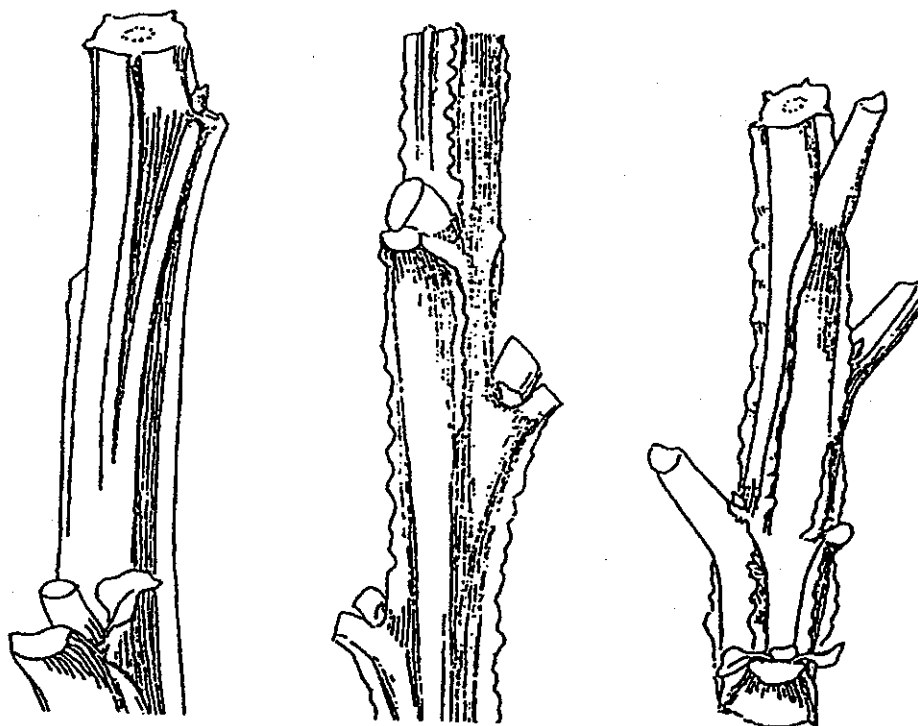


**Figure 11: Leaf Dissection**

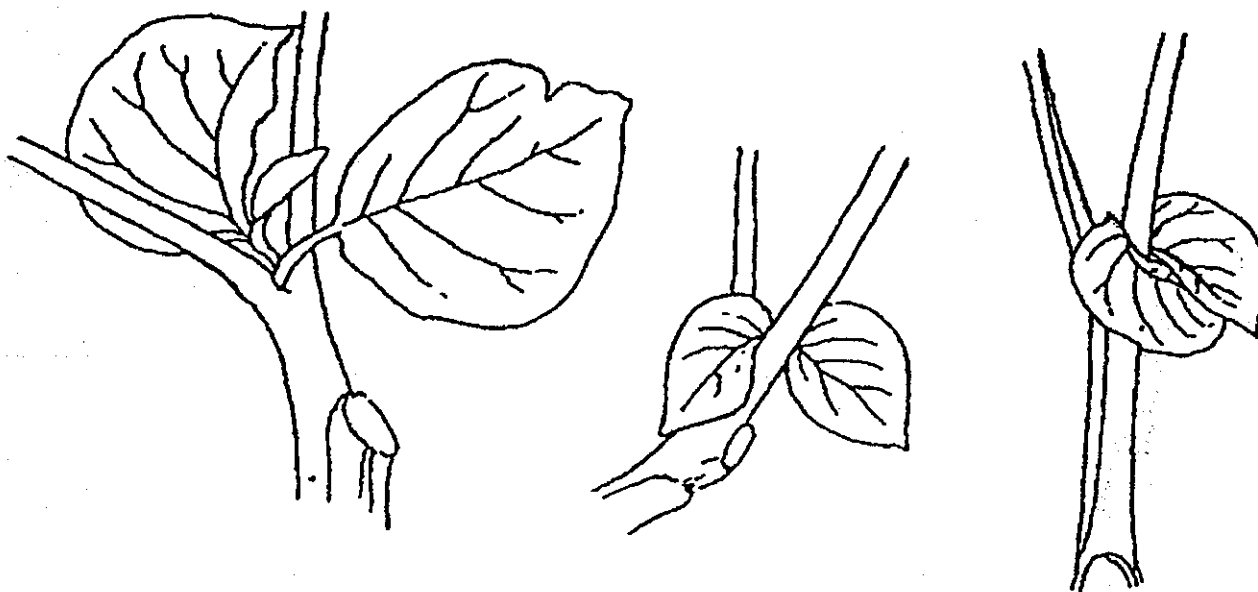


**Figure: 12 Stem Wings**

200200251



**Figure 13: Leaf Stipules:**



**Supplemental Exhibit D**  
**Variety: 'W-1355-1'**

'W-1355-1' exhibits fewer external and internal defects and a greater B size yield when compared to 'Snowden' and 'Atlantic'. Additionally, 'W-1355-1' exhibits a lower specific gravity than Snowden and Atlantic, and lower levels of common scab than 'Atlantic'. This data is provided in Table 2 below:

Table 2 Characteristics of 'W-1355-1' vs. 'Atlantic' and 'Snowden'

Cultivar	Vine Maturity (1-9)*	US#1 Yield (cwt/A)	External Defects (%)**	Internal Defects (%)***	B Size Yield (%)
'Atlantic'	4.9 a	482.9 a	8.2 a	15.2 a	1.8 a
'Snowden'	4.9 a	468.6 ab	9.2 a	6.5 b	1.8 a
'W-1355-1'	4.7 a	433.8 c	3.6 b	1.7 c	5.8 b

Note: A different letter caption means that these varieties are significantly different in performance for that trait in statistical sense as estimated by a T test.

\* Vine maturity rating scale: 1 = very early 9 = very late.

\*\* Frequency of undesirable tubers with external defects including green, knobs, growth cracks or misshaped.

\*\*\* Internal defects include: hollow heart, vascular discoloration and internal brown spots.

Table 2 (Cont'd). Characteristics of 'W-1355-1' vs. 'Atlantic' and 'Snowden'

Cultivar	Specific Gravity (0.000)*	Common Scab %	Early Blight**
'Atlantic'	1.086 a	4.2 a	5.5 a
'Snowden'	1.087 a	2.7 ab	5.9 a
'W-1355-1'	1.082 b	1.1 b	5.1 a

Note: A different letter caption means that these varieties are significantly different in performance for that trait in statistical sense as estimated by a T test.

\* Specific gravity tested using the Dry/Wet Weight method.

\*\* Foliar early blight visual symptoms evaluated two weeks before vine senescence, 1 = extreme leaf necrosis of most leaf tissues and 9 = no visible leaf necrosis due this disease.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICEEXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)  Wisconsin Alumni Research Foundation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER W-1355-1	3. VARIETY NAME  White Pearl
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  614 North Walnut Street P.O. Box 7365 Madison, WI 53707-7365	5. TELEPHONE (Include area code)  608-263-2500	6. FAX (Include area code)  608 263-1064
7. PVPO NUMBER  200200251		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. National or a U.S. based company? If no, give name of country ☒ YES ☐ NO10. Is the applicant the original owner? ☐ YES ☒ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☒ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

Applicant has received ownership from the assignment by the original breeder.

## PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14<sup>th</sup> and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-6964 (voice and TDD). USDA is an equal opportunity provider and employer.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705

EXHIBIT F  
DECLARATION REGARDING DEPOSIT

NAME OF OWNER (S) Wisconsin Alumni Research Foundation	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 614 Walnut Street, P.O. Box 7365 Madison, WI 53707-7365	TEMPORARY OR EXPERIMENTAL DESIGNATION W-1355-1
NAME OF OWNER REPRESENTATIVE (S) Lisa V. Mueller	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 614 Walnut Street, P.O. Box 7365 (WARF) Madison, WI 53707-7365 10 South Wacker Drive, Suite 2300 (Mueller) Chicago, IL 60606	VARIETY NAME <b>White Pearl</b> FOR OFFICIAL USE ONLY <i>per correspondence 7-27-2007 LMC</i> PVPO NUMBER <b>#200200251</b>

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.



Signature

Date

6/16/07